

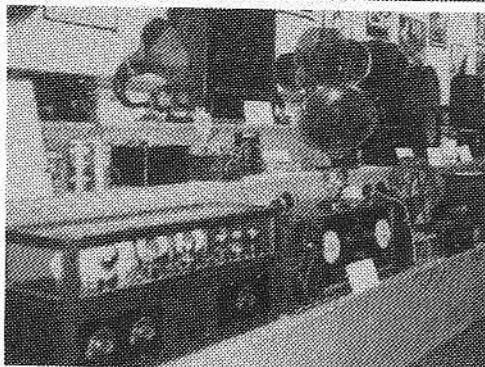
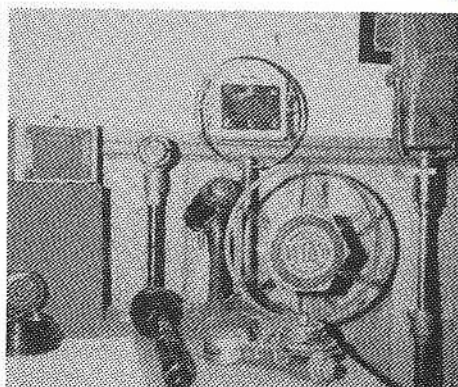
89/04 01

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# B.A.R.G. NEWS

APRIL 27<sup>3</sup>/<sub>5</sub>/89.



© Monthly Newsletter of the  
Ballarat Amateur Radio Group



89/04 02

# BALLARAT AMATEUR RADIO GROUP INCORPORATED OFFICERS 1988-1989

## EXECUTIVE COMMITTEE

|                              |                   |         | HOME    | BUSINESS |
|------------------------------|-------------------|---------|---------|----------|
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| <b>Imm. Past President:</b>  | RON WATKINS       | VK3 XOA | 35 6017 | 32 1447  |
| <b>Vice President:</b>       | GORDON CORNELL    | VK3 PUW | 39 2427 | 39 1135  |
| <b>Secretary:</b>            | JIM WRIGHT        | VK3 CFB | 32 7563 |          |
| <b>Treasurer:</b>            | HARRY HEKKEMA     | VK3 KGL | 35 7563 | 39 1001  |
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| <b>Publicity Officer:</b>    | CLARRY KITZELMANN | VK3 DMK | 38 1044 | 35 7756  |
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| <b>Net Co-ordinator:</b>     | FRED QUICK        | VK3 KQF | 32 3216 |          |
| <b>Technical Officer:</b>    | DICK ANTOZIEWICZ  | VK3 AEX | 32 3273 | 31 1818  |
| <b>Memb. Representative:</b> | NEAL DAVIDSON     | VK3 KQQ | 35 9612 |          |

## OFFICERS AND COMMITTEES

|                             |                  |         |         |         |
|-----------------------------|------------------|---------|---------|---------|
| <b>Newsletter Editors:</b>  | BOB TERRILL      | VK3 BNC | 39 5317 | 39 1001 |
|                             | HARRY HEKKEMA    | VK3 KGL | 35 7563 | 39 1011 |
| <b>Q.S.L. Manager:</b>      | JEFF PIGDON      | VK3 PAP | 32 7041 | 31 1211 |
| <b>Awards Manager:</b>      | MAURIE BATT      | VK3 XEX | 42 2245 |         |
| <b>Property Officer:</b>    | DICK ANTOZIEWICZ | VK3 AEX | 32 3273 | 31 1818 |
| <b>Hamfest Convenor:</b>    | KEVIN HUGHES     | VK3 WN  | 35 5011 |         |
| <b>WICEN Committee:</b>     | GORDON CORNELL   | VK3 PUW | 39 2427 | 39 1135 |
|                             | DICK ANTOZIEWICZ | VK3 AEX | 32 3273 | 31 1818 |
|                             | GEOFF SMITH      | VK3 ADB | 33 2112 |         |
| <b>Technical Committee:</b> | IAN ROBINSON     | VK3 BTX | 35 8031 |         |
|                             | MAURIE BATT      | VK3 XEX | 42 2245 |         |
|                             | PHIL SEDDON      | VK3 AQM | 31 5220 |         |
|                             | MURRAY FELSTEAD  | VK3 AAI | 41 2234 |         |

B.A.R.G. meets on the LAST FRIDAY in every month except December at the Ballarat Education Centre, Hopetoun St., Ballarat at 7.30 p.m.

Committee meetings are held at the Education Centre on the Wednesday two weeks prior to the Club meeting at 7.30 p.m. Executive committee members are expected to attend and any club member with business for discussion is welcome.

All correspondence to: The Secretary, BARG Inc., P.O. Box 216E, Ballarat East, 3350.

Applications for Awards to: Maurie Batt, RSD, Rokewood Junction, 3351.



CNR. RING RD. & WESTERN HWY BALLARAT  
(OPEN 10AM - 5 PM 7 DAYS A WEEK)

### FEATURES

- GRAMOPHONES • VINTAGE RADIOS • VISITORS PARTICIPATION
- MEMORABILIA • AUDIO DISPLAYS • DEMONSTRATIONS • CRYSTAL SETS

The "Orpheus Radio Museum" is operated by Richard and Sonja Wilson.  
The collection includes their private collection, the 3BA collection and other items on loan to the museum.  
The museum is run with the idea of preserving the history of radio in Australia and making it accessible to the public.  
If anyone has any information or items of interest to the museum, would they please contact, or write to, the "Orpheus Radio Museum" RSD B98, Ballarat 3352. Telephone (053) 34 2513.  
Let the public enjoy your piece of Radio History.



89/04 03

MINUTES OF GENERAL MEETING HELD ON 31st MARCH 1989.

MEETING OPENED by President John CFH at 7.45pm with 19 members present.

APOLOGIES. VK# KIT, AAP, DS, PFF, BNC, PSD, NIZ.

MINUTES of previous meeting as circulated in Newsletter confirmed. PUW/CAZ.

CORRESPONDENCE IN. DOTC granting permission to use BML call on Net.  
WIA Western Zone requesting details of Zone Net operators.  
Ballarat Courier, Thanks for assistance in Begonia Classic.

CORRESPONDENCE OUT. WIA Western Zone list of possible operators on Net.  
Ballarat Community Centre booking meeting room for 1989.

TREASURERS REPORT. General a/c \$343.24. VS&L a/c \$3198.46.  
Accounts for \$251.41 passed for payment. KGL/PEJ.

OSL MANAGER Jeff reported no cards received, 122 out.

CLUB NET More operators from the Club are required to participate.

EDUCATION Ian AXH stated that the novice class is going well and books have been received from WIA and circulated to students.

REPEATERS Problems are being experienced with Channel 3 and a motion was moved by Kevin WN and seconded by Reg CAZ that the Repeater Committee be authorised to purchase the necessary equipment to build a new repeater using a Phillips 828 transceiver. Carried.  
Moved Murray AAI seconded Fred KQF that Club purchase two Deep Cycle 100 amp hour batteries for emergency use on Channel 3 & 6.  
Carried.

NEWS LETTER MATERIAL FOR PUBLICATION URGENTLY NEEDED.

WICEN Gordon PUW reported on a poorly represented John Moyle contest and proposed that the Club hold a WICEN exercise in the near future.

GENERAL BUSINESS. It was decided that the Club Auction be held at May meeting.

MEETING CLOSED at 8.45pm and was followed by a talk by MURRAY AAI on Slide rules supported by a fine display of his collection of same.

#####

NEXT BARG MEETING is on Friday 28th April at 7.30pm. Guest Speaker will attend.

#####



89/04 04

PRESIDENTS REPORT FOR MAGAZINE APRIL 1989

I am going to be away again for this months meeting and Gordon will provide the program and hopefully keep you all in order.

Maurie XES advises us that there is not much activity concerning the awards put out from our club and our members really think it is about time we considered what to do about this in the future. Perhaps we should have upgrades, or perhaps we should seek a new award, but this takes time and money in design and obviously has to be attractive enough for us to get the reward back from the money invested. We all look forward to ideas about this at general business time in the meetings or by a note to the Secretary. We have some ideas on the books so those people who have submitted those take heart.

It was also mentioned at the meeting that there are not many CQ'S put out on 80 metres anymore and we were reminded that idea of Amateur Radio was to seek new friends and contacts and in that way we can advertise Ballarat Club and our facilities. So perhaps if you have got a spare moment spin around and give a shout, and perhaps all of us should not stick to our well known groups all the time yet I know that the nets we know are easier to join than any new ones.

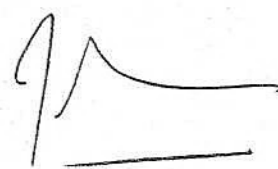
I am to remind you that the R.D. contest is coming up and there will be more details of that.

Also, May meeting will be the Junk Sale, which as you know is full of goodies at low prices and all the things will be there that you ever wanted and could never live without until this time next year of course when you will be putting them into the Junk Sale again!

Finally Gordon will try and organise a 2 metre day out North of ?hear to check on Smeaton repeater and I hope we can all support him. I also hope that all the repeaters go well and thank our technical team for looking after them.

I am going to try my 2 metres out around Alice to see how far their repeater performs and will see you in May.

73 VK3 CFH JOHN.



**BEWARE!!!**

Beware of FUSES and their carrying capacities!

Be sure you replace the correct fuse Ampere in your power supplies. Particularly in rigs with inbuilt power supplies, as most have only 3 Ampere fuses in the A.C. line. Below is an approximate guide as to fusing currents of S.W.G. wires.

- |    |     |     |    |                       |
|----|-----|-----|----|-----------------------|
| 1  | Amp | --- | 47 | Standard Wire Gauges. |
| 2  | Amp | --- | 43 | Standard Wire Gauges. |
| 3  | Amp | --- | 41 | Standard Wire Gauges. |
| 4  | Amp | --- | 39 | Standard Wire Gauges. |
| 5  | Amp | --- | 38 | Standard Wire Gauges. |
| 10 | Amp | --- | 33 | Standard Wire Gauges. |
| 20 | Amp | --- | 28 | Standard Wire Gauges. |
| 30 | Amp | --- | 25 | Standard Wire Gauges. |

\*\*\*\*\*  
\* STAN - VK3SE \*  
\*\*\*\*\*

# TO ALL MEMBERS AND NON-MEMBERS OF THE W.I.A.

89/04 05

## DO YOU WANT YOUR Q.S.L. CARDS?

Each year we must send a list of club members' names and calls to the Q.S.L. Buro, so we can get the cards sent to us. Members of the W.I.A. receive this service free of charge, non members of the W.I.A. must pay \$2.00 per year. This fee is now due. So to continue receiving your cards please fill in the section below and return it to me at the May meeting or drop it in to my Q.T.H. A.S.A.P. W.I.A. members please attach mailing sticker from A.R. Magazine to section below. Non members enclose \$2.00.

JEFF PIGDON  
Q.S.L. MANAGER  
5 GEORGE STREET  
BALLARAT EAST, 3350.

PLEASE PLACE MAILING STICKER FROM A.R. MAGAZINE AS PROOF  
OF MEMBERSHIP.

| CALL SIGN/S | NAME | ADDRESS |
|-------------|------|---------|
|             |      |         |

### FOR SALE

ELECTRAIRE OIL FILLED HEATER  
With thermostat and timer \$80.00

GOLDAIR ELECTRIC CONVECTION HEATER  
Has timer, thermostat and fan assist \$70.00

### WANTED

Circuit diagram for "BREVILLE" model 42  
console broadcast receiver. Uses 80,42  
and 6C6 valves.

Dick Forrester VK3VU  
(053) 391001 BH  
(053), 357663 AH



89/04 06

## CHANNEL WHAT ????

As a relative newcomer to the two metre VHF band, I am often mystified by hearing someone refer to a frequency by a channel number .."QSY Channel 50" ! Somewhere, I said to myself, there must be a piece of paper telling me what channel 50 must be but, after searching through old Call Books, Regulations Handbooks, ARRL and numerous magazines, nothing materialised!

So, ask the experts - the old timers! Apparently the practice of designating VHF frequencies by a channel number was abolished some time ago and no-one seemed to know where I would find such a list. They all could remember a few of them but no list ever emerged. Eventually, I was told that the frequency of 144.00 MHz was channel 00 and each further channel was an additional 50 KHz. So, I produced my own list:

| MHz    | Ch | MHz    | Ch | MHz    | Ch | MHz    | Ch |
|--------|----|--------|----|--------|----|--------|----|
| 144.00 | 00 | 145.00 | 20 | 146.00 | 40 | 147.00 | 60 |
| 144.05 | 01 | 145.05 | 21 | 146.05 | 41 | 147.05 | 61 |
| 144.10 | 02 | 145.10 | 22 | 146.10 | 42 | 147.10 | 62 |
| 144.15 | 03 | 145.15 | 23 | 146.15 | 43 | 147.15 | 63 |
| 144.20 | 04 | 145.20 | 24 | 146.20 | 44 | 147.20 | 64 |
| 144.25 | 05 | 145.25 | 25 | 146.25 | 45 | 147.25 | 65 |
| 144.30 | 06 | 145.30 | 26 | 146.30 | 46 | 147.30 | 66 |
| 144.35 | 07 | 145.35 | 27 | 146.35 | 47 | 147.35 | 67 |
| 144.40 | 08 | 145.40 | 28 | 146.40 | 48 | 147.40 | 68 |
| 144.45 | 09 | 145.45 | 29 | 146.45 | 49 | 147.45 | 69 |
| 144.50 | 10 | 145.50 | 30 | 146.50 | 50 | 147.50 | 70 |
| 144.55 | 11 | 145.55 | 31 | 146.55 | 51 | 147.55 | 71 |
| 144.60 | 12 | 145.60 | 32 | 146.60 | 52 | 147.60 | 72 |
| 144.65 | 13 | 145.65 | 33 | 146.65 | 53 | 147.65 | 73 |
| 144.70 | 14 | 145.70 | 34 | 146.70 | 54 | 147.70 | 74 |
| 144.75 | 15 | 145.75 | 35 | 146.75 | 55 | 147.75 | 75 |
| 144.80 | 16 | 145.80 | 36 | 146.80 | 56 | 147.80 | 76 |
| 144.85 | 17 | 145.85 | 37 | 146.85 | 57 | 147.85 | 77 |
| 144.90 | 18 | 145.90 | 38 | 146.90 | 58 | 147.90 | 78 |
| 144.95 | 19 | 144.95 | 39 | 146.95 | 59 | 147.95 | 79 |

And, having worked that lot out, I discovered that there was yet another list! When repeaters first came on the scene, they too, were given channel members so the scene becomes even more complicated! So, for the record, another list:

| MHz    | Ch | MHz    | Ch | MHz    | Ch | MHz    | Ch |
|--------|----|--------|----|--------|----|--------|----|
| 146.65 | 01 | 146.85 | 05 | 147.05 | 09 | 147.25 | 13 |
| 146.70 | 02 | 146.90 | 06 | 147.10 | 10 | 147.30 | 14 |
| 146.75 | 03 | 146.95 | 07 | 147.15 | 11 | 147.35 | 15 |
| 146.80 | 04 | 147.00 | 08 | 147.20 | 12 | 147.40 | 16 |

Note that these channels are still 50 KHz apart, but it became necessary to separate some repeaters by only 25KHz so, rather than have "Channel 10 1/2" this system was also discontinued.

The purpose of producing these lists is twofold. Firstly, they might help other newcomers to unravel "Channelspeak" and secondly, (and more importantly) they might remind those who continue to use this OUTMODED procedure of the error of their ways.

David Harris, VK3DVW

REPRINT FROM THE EMDRC RADIO BULLETIN.



89/04 07

Calls worked during the month of March.

EA8BMM Canary Islands: PO BOX 388, PUERTO DE LA CRUZ, CANARY ISLANDS. 38400

CT1CIU Portugal : PO BOX 34, BRAGANZA, PORTUGAL.

ZK1DD Aitutaki Island: Sth Cook: VIA G3MCN, MR. HARRY JAMES, BURROWS LEDGE RIDGE, EDISBURY HILL, DELAMERE, CHES, CW82HX, UNITED KINGDOM.

A35UF Tonga: The DL5UF expedition continues via the buro only for this one.

5W1YL Western Samoa: Buro only via HB9CUY.

5W1GW " " " " : PO BOX 1625, APIA, WESTERN SAMOA.

5W1SB " " " " : PO BOX 4555, APIA, WESTERN SAMOA.

V31PC Belize, Central African Republic: Buro only they have problems with disappearing Mail if you know what I mean.

KG6SL Saipan, Marianna Islands: Buro via WA6 AHF only.

3B8DB Mauritius: via call book address (mine still coming from the States)

FO0EXV/M Marquesas Islands: FRENCH DX ASSOCIATION, PO BOX 88 BRUZ, FRANCE 35170

JY9LC Jordon: Jack Gordon, PO BOX 290, TLAA AL ALI, AMMAN, JORDON

6Y5IC Jamaica: HAMPSHIRE HOUSE, KINGSTON, No. 10, JAMAICA.

Z21QZ Zimbabwe: PO BOX 1836, HARARE, ZIMBABWE, AFRICA.

DL2GAC/H44: MR B. STEFAN, AACHSTR 25, D777, UHIDIN GEN 1, WEST GERMANY.

9M2ZZ :MR. KEVIN WALTON, C/O U.S. EMBASSY, PO BOX 10035, KUALA LUMPUR, 50070, MALAYSIA.

3DA0BK: PO BOX 122, EVINI, SWAZILAND, AFRICA.

AP2UR: NOOR MUHAMMAD KHAN, F289 ROHMANPURA, LAHORE, PAKISTAN (super fast with IRC'S)

This is just a sample of what has been on ten metres in the last couple of weeks. Most times a couple of IRCs will produce the magic card. Unfortunately there are exceptions, and these turn out to be the countries that are desperately needed. These, so far in my case include: Macao, Rotuma, Vietnam, Faroe Islands, Brunei, and so on. I guess they just pocket the IRCs and buro the cards, or they are frightfully slow. Only time will tell. This is becoming a black mark against direct QSLing and the poor return rate has forced me to reduce my direct sending of cards to about one third of what it was.

On the weekend of the WPX Contest just gone, some of the best DX was heard by me in years. As you can see by the above list, and that is only what I worked! There were full calls above 28.6 calling all over the place. A good sign was that Africa was heard and worked, by VK's for the first time in months on ten. During the contest I had 342 contacts, and these included 64 countries in less than 12 hours, better band conditions than the CQWW.

To change the pace a little, after talking to friends on the Solomon Islands, I have struck a serious problem that may jeopardise the whole DXpedition there. The hierarchy are fairly clicky apparently about who they give H44 calls to and visiting hams are not usually obliged with reciprocal rights. I was talking to Greg the other day, H44GP, and he imparted the story of a full call yachtsman who applied for a call but was rejected. (perhaps DL2GAC???) After talking to the above he confirmed the hassles but did not say that in fact it was himself. It was a great pity, but I think the portable capacity still qualifies me for the 4 from 44 award I have striving for so long. I am still waiting on the result of my application to operate whilst in Guadalcanal, but it is now in the hands of the Consul-General to Australia, fortunately in my case a friend of my father's so who knows? The plans for my DXpedition include A35, H44 and ZK1 Aitutaki. So listen out guys you never know who might pop out of nowhere one day! As most of you probably already know, I am leaving Victoria for the northern climate and beaches later this year permanently. The DXpedition will be based in Brisbane but I will be shifting to Cairns. I was going to leave as soon as I got my DXCC but at last count that was 110 countries so that is no longer a matter for consideration because of the 600km rule. At the moment I have two operators for the expedition, KW6J, BRIAN STAPLETON, from California, and myself. Brian will meet me in Brisbane and will be the six metre operator for trip. All we need to organise are the QSL cards and managers and here we come. We envisage 30-40,000 QSO's and as the sunspot peak is due at the time it might be even more. This should be a tremendous experience, but more importantly, FUN! Now I have my DXCC, ON PAPER ANYWAY, I am trying to do the study for the upgrade to AOCP. Boy this is tough as electronics and I have this agreement and we don't see eye to eye at all. The light at the end of the tunnel is worth it though (6 here I come!) and I am eagerly looking forward to the exam in May. Even if I don't pass the theory this time it will give me experience and hopefully, nerves excepting, the CW will be out of the way. That's it for me this month, 73's and don't let the DX bug bite too deep.....

Paul Saxe VK3PSO



89/04 08

Dear Bob,  
For the newsletter.

### Ball Bearings, March Flies, and Field Day 1989

Field Day 1989 was my first attempt at the 24 hour Division of the John Moyle Field Day Contest. I traipsed up to the Misery Ranges, about 50 km west of Ballarat. It's 1000 ft above sea level and very quiet. On the other side of the paddock was VK3XEX who operated VHF only.

I strung up a G5RV through an antenna tuner and my power output was 10 w or less. Usually less because my batteries had been unevenly charged by a wind generator. The first battery lasted one hour only. Next year I'll know to bring along a voltmeter. Anyway, accurate reports from other stations soon let me know about my signal, such as an RST of 229.

I operated within a dome tent but it was so hot that I needed to throw a cover over the top. Well, I flung it so hard that I lost my balance and fell off the chair onto ball bearings in the mega quantity. Fortunately it was dry, hard ground which meant the ball bearings didn't stick. As I limped back into the tent, I could see that about 500,000 March flies had entered via the open tent flap. I certainly learned a great deal about the anatomy of those beasts when I swept out their carcasses as evening drew on. Next year I'll bring a broom.

I was so nervous that first day. I am surprised anyone actually copied my cw. When I went to make a cup of tea, I discovered that my gas cylinder was empty. And it had been working for the past three years! I couldn't understand it. Next year I'll have the cylinder refilled.

There were two heartaches. I called some ssb stations for cross mode QSOs but they said their cw wasn't good enough. Later, when their cw op was at the helm, I could hear them working ZLs at 20 wpm. I had foolishly brought along only two pencils and one pen. One pencil disappeared and I used the other until it had no graphite showing. The pen ran out of ink in the middle of a QSO. It was with a ZL, too, and they give the longest, strangest set of numbers for their exchange. Oy. So, using fingernails, I managed to peel off enough wood to make the pencil usable.

Gordon VK3KGC, Charlie VK3TCH, and Ken VK3PUA showed up. Ken stayed a short time and Gordon and Charlie set up their gear and tent not far from Maurie. Neither could stay but they managed to work a few stations.

In the end, I made (hold onto your hats) 24 contacts. Next time ....

73 de Maggie VK3CFI

*Maggie*



89/04 09

LICENCE CONDITIONS AND REGULATIONS APPLICABLE TO THE AMATEUR SERVICE.

CLUB STATIONS.  
-----

- 1 The licensee of a club station shall cause to be kept a log book in which must be entered;-
  - (a) a chronological record of all transmissions;
  - (b) the frequency and type of emission used;
  - (c) the station (s) communicated with; and
  - (d) the name and call sign of the qualified person controlling the transmissions.
- 2 A club station may not be operated in a mobile capacity, or at other than its licensed location, without prior approval of the State Manager.
- 3 Amateur club stations shall not be operated without a qualified person being in attendance to control transmissions.
- 4 A club station shall only be operated on frequency bands and at power levels authorised by the club station licence and for which the controlling amateur operator is qualified.

EXAMPLE: Where an unrestricted amateur club station's operation is controlled by a person holding a NAACP the station may only operate on such frequencies and with power and emissions as are applicable to a Novice Amateur Station.

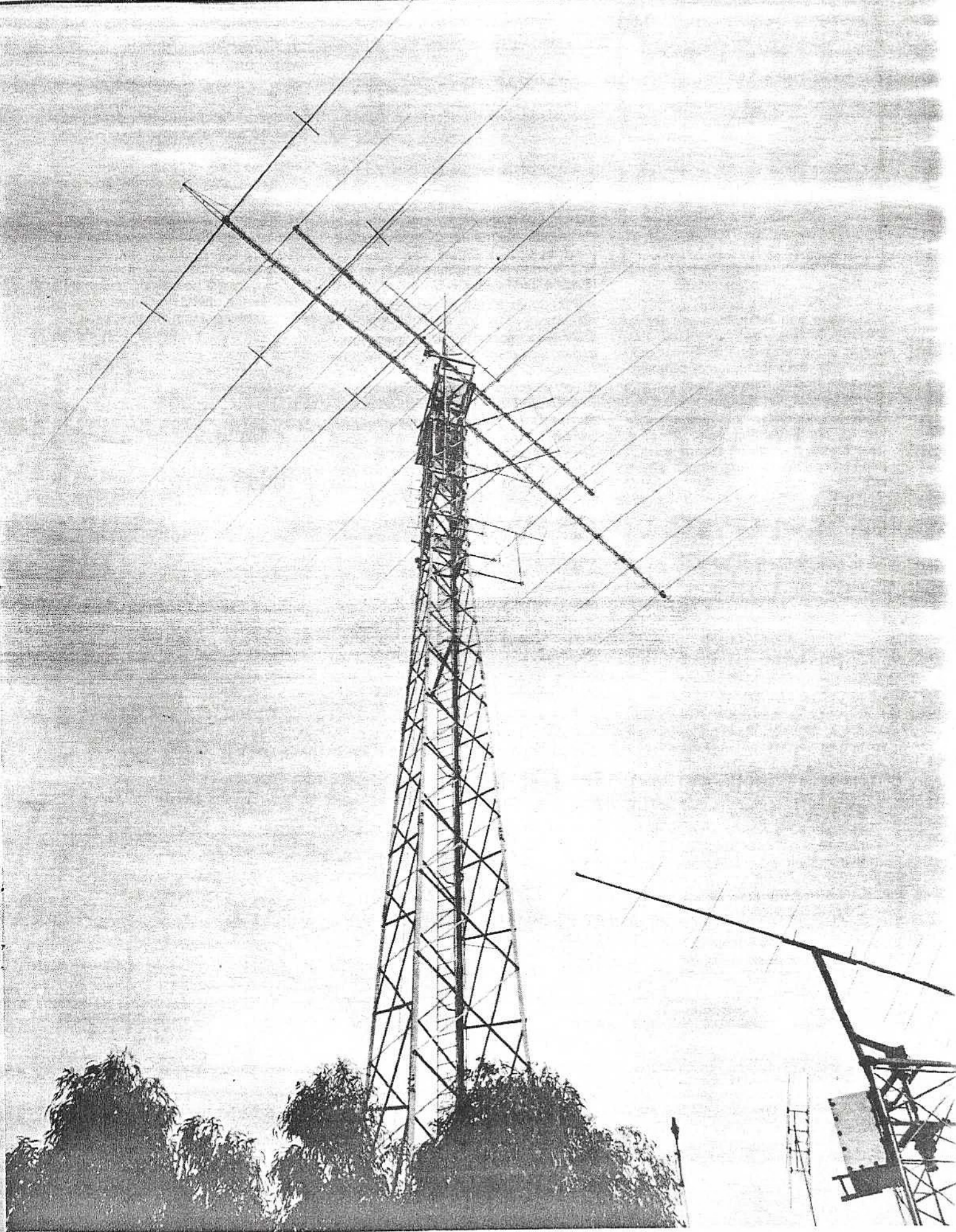
B.A.R.G. MAY MEETING.

JUNK SALE will be held on our May meeting. Start collecting now!

The photo in March Newsletter was the WESTERN ZONE CONVENTION held on OCT 22, 1977 at the Golden Gate Motel in Ararat.  
(How's that for a memory Woody?) Thanks Charlie.



89/04 10



Reprint courtesy Amateur Radio Action.



89/04 11

Reprint courtesy Amateur Radio Action.

## Now here's a mast!

Story and pictures by Barry Wilton, VK3XV,  
Moorabbin, Victoria

***We all dream of owning the ultimate antenna set-up. Two Ballarat, Victoria, amateurs decided to dream no more, and set about turning idle ideas into reality. But where do you find towers big enough...***

An antenna system which would rival any of the European or Stateside 'big guns' can be seen right here in Australia.

Located high on a hill overlooking the major inland city of Ballarat, Victoria, and a part of the truly magnificent amateur radio station owned by John Lewis, VK3HW, and Bill Sadler, VK3AMH, this installation is surely a masterpiece in engineering design and execution.

The design work and engineering drawings alone took four months of full-time research and painstaking labor, but the two say the effort was well worthwhile, and the completed installation is of the highest professional standard.

The tower itself is an ex-State Electricity Commission 230 kV transmis-

sion line tower weighing in at just eight tonnes. It measures almost 36 metres (117 feet) to the catwalk, and 45.5 metres (149 feet) to the top of the mast.

The top antenna — at the 140' mark — is an 8-element log periodic covering 50 to 54 MHz. The antenna itself is constructed on a 20' boom, weighs 16 kg, and has a forward gain of 10.8 dBd.

One step lower — at 130' — is another log periodic. This 12-element beauty covers 14 to 30 MHz from its 51' length. It weighs in at 85 kg, and offers 8.85 dBd of useful gain.

Think that's big? That's *nothing*!

Sitting at the 120' mark is a 140 kilo (300 lb!) lump of log periodic, this time covering 7 to 10 MHz. It's constructed of a massive 7 1' long boom, and revels in 8.65 dBd of gain.

The lower two antennas have 6" square aluminium alloy lattice booms, with a total of more than 1200 monel rivets holding everything together.

The entire design and construction stages of the antennas were carried out by Bill and John at their own homes.

Getting approval for the erection of such giant structures usually requires some kind of tacit understanding with the neighbors. When one nearby neighbor was asked to comment on the awesome monolith the reaction was certainly **not** the one most usually expected.

She relied: "I think it is truly magnificent and in the sunset it glints like gold and looks just like a huge sailing ship..."

It just goes to show what good PR can do!

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89/04 12

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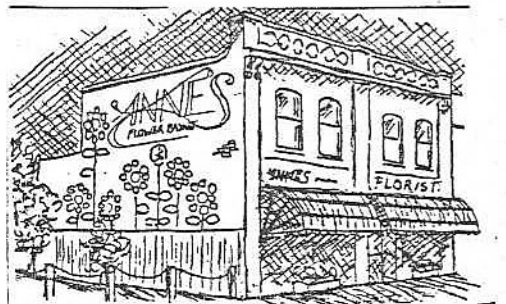
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